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☐ 1: J Mol Biol. 1998 Oct 9;282(5):933-46.

ELSEVIER
FULL-TEXT ARTICLE

Links

TOM1p, a yeast hect-domain protein which mediates transcriptional regulation through the ADA/SAGA coactivator complexes.

Saleh A, Collart M, Martens JA, Genereaux J, Allard S, Cote J, Brandl CJ.

Department of Biochemistry, University of Western Ontario, London, N6A 5C1, Canada.

The hect-domain has been characterized as a conserved feature of a group of E3 ubiquitin ligases. Here we show that the yeast hect-domain protein TOM1p regulates transcriptional activation through effects on the ADA transcriptional coactivator proteins. Null mutations of tom1 result in similar defects in transcription from ADH2 and HIS3 promoters, and enhanced transcription from the GAL10 promoter as do null mutations in ngg1/ada3. Strains with disruptions of both ngg1 and tom1 have the same phenotype as strains with a disruption of only ngg1 implying that these genes are acting through the same pathway. In the absence of TOM1p, the normal associations of the ADA proteins with SPT3p and the TATA-binding protein are reduced. The action of TOM1p is most likely mediated through ubiquitination since mutation of Cys3235 to Ala, corresponding residues of which are required for thioester bond formation with ubiquitin in other hect-domain proteins, results in similar changes in transcription as the null mutation. A direct role for TOM1p in regulation of ADA-associated proteins is further supported by the finding that SPT7p is ubiquitinated in a TOM1p-dependent fashion and that TOM1p coimmunoprecipitates with the ADA proteins. Copyright 1998 Academic Press.

PMID: 9753545 [PubMed - indexed for MEDLINE]

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Related Links

Differential requirement of SAGA components for recruitment of TATA-box-binding protein to promoters in vivo. [Mol Cell Biol. 2002]

Inhibition of TATA-binding protein function by SAGA subunits Spt3 and Spt8 at Gcn4-activated promoters. [Mol Cell Biol. 2000]

Components of the SAGA histone acetyltransferase complex are required for repressed transcription of ARG1 in rich media. [Mol Cell Biol. 2002]

The *S. cerevisiae* SAGA complex functions in vivo as a coactivator for transcriptional activation. [Gene Expr. 2001]

GCN5, a yeast transcriptional coactivator, induces chromatin reconfiguration of HIS3 promoter in vivo. [Biochem Biophys Res Commun. 1998]

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☐ 1. Document ID: US 6998240 B2

L7: Entry 1 of 6

File: USPT

Feb 14, 2006

US-PAT-NO: 6998240

DOCUMENT-IDENTIFIER: US 6998240 B2

TITLE: Screen for selective inhibitors or activators of Smad protein function

DATE-ISSUED: February 14, 2006

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20050164295 A1

July 28, 2005

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Hoffmann; F. Michael

Madison

WI

US

Comer; Allen R.

Madison

WI

US

US-CL-CURRENT: 435/7.1; 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	Keywords	Drawings
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☐ 2. Document ID: US 6905836 B2

L7: Entry 2 of 6

File: USPT

Jun 14, 2005

US-PAT-NO: 6905836

DOCUMENT-IDENTIFIER: US 6905836 B2

**** See image for Certificate of Correction ****TITLE: Methods for identifying compounds that inhibit ubiquitin-mediated proteolysis of i.kappa.b

DATE-ISSUED: June 14, 2005

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Ben-Neriah; Yinon

Mevasseret Zion

IL

Alkalay-Snir; Irit

Zur Hadassah

IL

Hatzubai; Ada

Kibutz Tzuba

IL

Shushan; Etti Ben	Akiva	IL
Davis; Matti	Modiin	IL
Yaron; Avraham	Jerusalem	IL

US-CL-CURRENT: [435/17](#); [435/15](#), [435/69.1](#), [435/69.2](#), [435/8](#), [530/300](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 6569662 B1

L7: Entry 3 of 6

File: USPT

May 27, 2003

US-PAT-NO: 6569662

DOCUMENT-IDENTIFIER: US 6569662 B1

TITLE: Nucleic acids and polypeptides

DATE-ISSUED: May 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tang; Y. Tom	San Jose	CA		
Zhou; Ping	San Jose	CA		
Drmanac; Radoje T.	Palo Alto	CA		

US-CL-CURRENT: [435/212](#); [435/183](#), [435/195](#), [435/213](#), [435/214](#), [435/218](#), [435/219](#),
[435/226](#), [435/227](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 6482936 B1

L7: Entry 4 of 6

File: USPT

Nov 19, 2002

US-PAT-NO: 6482936

DOCUMENT-IDENTIFIER: US 6482936 B1

TITLE: Isolated human secreted proteins, nucleic acid molecules encoding human secreted proteins, and uses thereof

DATE-ISSUED: November 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hu; Song	Pleasanton	CA		
Ketchum; Karen A.	Germantown	MD		
Gong; Fangcheng	Germantown	MD		
Ladunga; Istvan I.	Foster City	CA		
Higgins; Maureen E.	Bethesda	MD		

Brandenberger; Ralph Menlo Park CA

US-CL-CURRENT: [536/23.1](#); [435/252.1](#), [435/252.3](#), [435/320.1](#), [435/70.1](#), [530/350](#),
[536/23.4](#), [536/24.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 6440726 B1

L7: Entry 5 of 6

File: USPT

Aug 27, 2002

US-PAT-NO: 6440726

DOCUMENT-IDENTIFIER: US 6440726 B1

TITLE: Expression vectors comprising multiple shear stress responsive elements (SSRE) and methods of use for treating disorders related to vasculogenesis and/or angiogenesis in a shear stress environment

DATE-ISSUED: August 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Resnick; Nitzan	Haifa			IL

US-CL-CURRENT: [435/320.1](#); [435/325](#), [435/455](#), [435/69.1](#), [514/44](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 6331614 B1

L7: Entry 6 of 6

File: USPT

Dec 18, 2001

US-PAT-NO: 6331614

DOCUMENT-IDENTIFIER: US 6331614 B1

TITLE: Human CDC14A gene

DATE-ISSUED: December 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wong; Alexander K. C.	La Jolla	CA		
Teng; David H. -F.	Salt Lake City	UT		
Tavtigian; Sean V.	Salt Lake City	UT		

US-CL-CURRENT: [536/23.5](#); [435/320.1](#), [435/325](#), [536/23.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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